CASE

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CONTENTS

FIGURES

TABLES

1
Overview

1.1 Inflectional case

Case is a system of marking dependent nouns for the type of relationship they bear to their heads. Traditionally the term refers to inflectional marking, and, typically, case marks the relationship of a noun to a verb at the clause level or of a noun to a preposition, postposition or another noun at the phrase level. Consider the following Turkish sentence,

(1)	*Mehmet*	*adam-a*	*elma-lar-ı*	*ver-di*
	Mehmet.NOM	man-DAT	apple-PL-ACC	give-PAST.3SG
	'Mehmet gave the apples to the man.'			

In this sentence *-ı* indicates that *elmalar* is the direct object of the verb *vermek* 'to give'. The suffix *-ı* is said to be an accusative (or objective) case marker and the word form *elmaları* is said to be in the accusative case.[1] The suffix *-ı* also indicates that *elmaları* is specific, since in Turkish only specific direct objects are marked as accusative. *Adam* is marked by the suffix *-a* which indicates that it is the indirect object. *Adama* is in the dative case. *Mehmet* contrasts with *elmaları* and *adama* in that it bears no overt suffix. It is said to be in the nominative case, which in this sentence indicates the subject.[2]

The term **case** is also used for the phenomenon of having a case system and a language with such a system is sometimes referred to as a **case language**.

Our definition of case refers to marking dependent nouns for the type of relationship they bear to their heads. This definition obviously embodies certain assumptions about what is a head and what is a dependent or modifier. The verb is taken to be the head of the clause, since it largely determines what dependents may be present. *Vermek* 'to give', for instance, is a three-place verb that takes three arguments: a giver (expressed in (1) by the subject in the nominative case), a gift (expressed in (1) by the direct object in the accusative case) and a recipient (expressed by the indirect object in the dative case). A verb may also have other dependents expressing,

Table 1.1 *Turkish case system*

nominative	*adam*
accusative	*adamı*
genitive	*adamın*
dative	*adama*
locative	*adamda*
ablative	*adamdan*

for instance, time or location, which, though not licensed by a particular verb, are nevertheless modifiers of the verb.

Turkish has a system of six cases as in Table 1.1. The locative marks location as in *Istanbul-da* 'in Istanbul', and the ablative indicates 'from' or 'out of' as in *Ankara-dan* 'from Ankara'. The genitive is used in phrases like *adam-ın ev-i* 'the man's house' where *ın* corresponds to '*s* in English. There is a complication. Note that *ev* 'house' bears a suffix *-i* which is a third-person-possessive form translatable as 'his', 'her' or 'its'. In Turkish 'the man's house' is literally 'the man's, his house'. The genitive meets the definition of case on the assumption that *ev* is the head of a noun phrase and *adam* a dependent.

In (1) the cases are determined or governed by the verb. *Vermek* 'to give' requires a subject in the nominative, an indirect object in the dative and a direct object in the accusative (if specific) or nominative (if nonspecific). Cases can also be governed by prepositions or postpositions. Turkish has postpositions which govern the ablative like *dolayı* 'because of': *toplantı-dan dolayı* 'because of the meeting', and *sonra* 'after': *tiyatro-dan sonra* 'after the theatre'.[3]

The word forms displayed in Table 1.1 make up a **paradigm**, i.e. they constitute the set of case forms in which the lexeme *adam* can appear.[4] In Turkish one could say that there is only one paradigm in that a constant set of endings is found for all nouns. It is true that noun stems of different shapes take different inflectional suffixes, but all these differences are phonologically conditioned by principles of vowel harmony and the like. The locative, for instance, has the form *-da* following stems with back vowels and *-de* following stems with front vowels. The *d* of this suffix devoices to *t* following a stem-final voiceless consonant: *kitap-ta* 'on (the) book'.[5] One could refer to *-da*, *-de*, *-ta* and *-te* as case markers or one could consider that at a more abstract level there was only one locative case marker. We need to make a distinction between **cases** (of which there are six in a system of oppositions), and the **case markers** or **case forms** through which the cases are realised. A case marker is an affix and a case form is a complete word. In Turkish the case affixes can be separated from the stem, so it is possible to talk about case markers. In some languages, however, it is not possible to isolate a case suffix, so it is necessary to

talk in terms of the various word forms that express the cases of the stem. These are case forms. (See also Seidel 1988: 36.)

It is also necessary to make a further distinction between the cases and the **case relations** or **grammatical relations** they express. These terms refer to purely syntactic relations such as subject, direct object and indirect object, each of which encompasses more than one semantic role, and they also refer directly to semantic roles such as source and location, where these are not subsumed by a syntactic relation and where these are separable according to some formal criteria. Of the two competing terms, case relations and grammatical relations, the latter will be adopted in the present text as the term for the set of widely accepted relations that includes subject, object and indirect object and the term case relations will be confined to the theory-particular relations posited in certain frameworks such as Localist Case Grammar (section 3.4.4) and Lexicase (section 3.4.5).

Grammatical relations need not be in a one-for-one correspondence with cases. In Turkish the nominative expresses the subject, but not all noun phrases in the nominative are subject, since, as noted above, the nominative also marks a nonspecific direct object of a transitive verb (see (1) in chapter 5).

There is a widely held view, explicit, for instance, in Relational Grammar (section 3.4.3), that all dependents can be allotted to a particular grammatical relation whether purely syntactic or semantic. However, in practice it is often unclear how certain dependents are to be classified. For this reason I will refer, for the most part, to cases as having functions or meanings. These terms are traditional and they can be taken to be theory-neutral or perhaps pre-theoretical. The term **function** will range over well-defined grammatical relations such as direct object and other relations such as 'agent of the passive verb' where different theories might ascribe the function to different relations. The term **meaning** will cover not only semantic roles that are demarcated by case marking or some other formal means, but also semantic roles that are distinguished only on intuitive grounds, roles whose status remains unclear in the absence of some argumentation.

Turkish is a convenient language to use to illustrate case since it is an agglutinative language, i.e. one in which there are affixes that are easily separable from the stem and from one another. With nouns, the stem, the number marking and the case marking are all separable (except for some phonological assimilations). This can be seen in *elma-lar-ı* in (1) where *-lar* is the plural marker and *-ı* the accusative case marker. However, the traditional notion of case was developed on the basis of Ancient Greek and Latin where there are several complicating factors. In Latin, for instance, it is not possible to separate number marking from case marking. The two categories have fused representation throughout the system or **cumulative exponence** as Matthews calls it (Matthews 1974/1991). This means separate paradigms for the two number categories, singular and plural. Moreover, there are different

Table 1.2 *Latin case paradigms*

	1	2		3a	3b	4	5
	ā-stems	*o*-stems		cons.stems	*i*-stems	*u*-stems	*ē*-stems
	feminine	masculine	neuter				
	domina	*dominus*	*bellum*	*cōnsul*	*cīvis*	*manus*	*diēs*
	‘mistress’	‘master’	‘war’	‘consul’	‘citizen’	‘hand’	‘day’
			singular				
Nominative	*domina*	*dominus*	*bellum*	*cōnsul*	*cīvis*	*manus*	*diēs*
Vocative	*domina*	*domine*	*bellum*	*cōnsul*	*cīvis*	*manus*	*diēs*
Accusative	*dominam*	*dominum*	*bellum*	*cōnsulem*	*cīvem*	*manum*	*diem*
Genitive	*dominae*	*dominī*	*bellī*	*cōnsulis*	*cīvis*	*manūs*	*diēī*
Dative	*dominae*	*dominō*	*bellō*	*cōnsulī*	*cīvī*	*manuī*	*diēī*
Ablative	*dominā*	*dominō*	*bellō*	*cōnsule*	*cīvī*, *cīve*	*manū*	*diē*
			plural				
Nominative	*dominae*	*dominī*	*bella*	*cōnsulēs*	*cīvēs*	*manūs*	*diēs*
Vocative	*dominae*	*dominī*	*bella*	*cōnsulēs*	*cīvēs*	*manūs*	*diēs*
Accusative	*dominās*	*dominōs*	*bella*	*cōnsulēs*	*cīvīs*, *cīvēs*	*manūs*	*diēs*
Genitive	*dominārum*	*dominōrum*	*bellōrum*	*cōnsulum*	*cīvium*	*manuum*	*diērum*
Dative	*dominīs*	*dominīs*	*bellīs*	*cōnsulibus*	*cīvibus*	*manibus*	*diēbus*
Ablative	*dominīs*	*dominīs*	*bellīs*	*cōnsulibus*	*cīvibus*	*manibus*	*diēbus*

case/number markers for different stem classes. Traditionally five such classes are recognised, and there are also variations within the classes. The five classes, or declensions as they are usually referred to, are illustrated in Table 1.2: the first declension (*ā*-stems), second declension (*o*-stems), third declension (consonant stems and *i*-stems), the fourth (*u*-stems) and fifth (*ē*-stems). The designations *ā*-stems, *o*-stems, etc. are not synchronically transparent and reflect the product of historical reconstruction. For practical purposes there are five arbitrary declensions, though the term *i*-stem has some relevance for those members of the third declension that have *-i* in the ablative singular, accusative plural and genitive plural.

In Latin there is also a three-way gender distinction: masculine, feminine and neuter. With a few exceptions male creatures are masculine and females feminine, but inanimates are scattered over all three genders (though almost all neuter nouns are inanimate). There is a partial association of form and gender in that *ā*-stems are almost all feminine and *o*-stems mostly masculine (except for a subclass of neuters represented by *bellum* in Table 1.2). This means that there can be fusion of gender, number and case. The point is illustrated in Table 1.2 where we have *domina* ‘mistress (of a household)’ illustrating feminine *ā*-stems and *dominus* ‘master (of a household)’, which is based on the same root, representing masculine *o*-stems. As can be seen from Table 1.2 the word form *domina* simultaneously represents nominative case, feminine gender and singular number, *dominum* represents

accusative case, masculine gender and singular number, and similarly with other word forms.

In Latin there is concord between a noun and an attributive or predicative adjective. This concord is sensitive to case and number, and those adjectives that belong to the first and second declension are sensitive to gender so we find *domina bona* 'good mistress' and *nauta bonus* 'good sailor' where *nauta* is one of the few nouns of masculine gender in the first declension. With adjectives of the first and second declensions the inflections simultaneously represent case, number and gender without exception.

As can be seen, six cases are recognised: nominative, vocative, accusative, genitive, dative and ablative; however, no paradigm exhibits six different forms. In the traditional descriptions a case is established wherever there is a distinction for any single class of nominals. The vocative, the case used in forms of address, has a distinctive form only in the singular of the second declension. Elsewhere there is a common form for the nominative and vocative; however, distinct nominative and vocative cases are recognised for all paradigms.

Each case has a number of functions, which can be summarised as follows. The nominative encodes the subject and nouns that stand in a predicative relation to the subject as in *Dominus est cōnsul* 'The master is consul.' The accusative encodes the direct object and nouns that stand in a predicative relation to the object as in *Fēcerunt dominum cōnsulem* 'They made the master consul.' It also expresses destination as in *Vādō Rōmam* 'I am going to Rome' and extent as in the following:

(2)

Rēgnāvit	*is*	*paucōs*	*mensīs*
rule.PERF.3SG	he.NOM	few.PL.ACC	month.PL.ACC

'He ruled for a few months.'

A number of prepositions govern the accusative including all those that indicate 'motion towards' or 'extent'. In fact a construction like *Vādō Rōmam* where the accusative expresses destination without being governed by a preposition is mainly confined to the names of towns and small islands; compare *Vādō ad urbem* 'I am going to the city' and *Vādō in urbem* 'I am going into the city.'

The genitive is mainly used to mark noun phrases as dependents of nouns, i.e. it is primarily an adnominal case. Among its adnominal functions is the encoding of possessor: *cōnsulis equus* 'the consul's horse'. The genitive is also used to mark the complements of certain verbs. For example, with some verbs of remembering and forgetting it marks the entity remembered or forgotten (3); with some verbs of reminding the person reminded is encoded as an accusative-marked direct object and the entity to be remembered is put in the genitive (4), and with verbs of accusing, condemning or acquitting the accused is expressed as a direct object in

the accusative with the fault or crime in the genitive (5):

(3) *Diēī meminerit cōnsul*
day.GEN remember.FUT.PERF.3SG consul.NOM
'The consul will remember the day.'

(4) *Cōnsulem amicitiae commonefēcit*
consul.ACC friendship.GEN remind.PERF.3SG
'He reminded the consul of friendship.'

(5) *Parricīdiī cōnsulem incūsat*
parricide.GEN consul.ACC accuse.3SG
'He accuses the consul of parricide.'

The main function of the dative is to mark the indirect object. A few three-place verbs like *dāre* 'to give' take a direct object in the accusative and an indirect object in the dative (6). A few score of two-place verbs take only one object, an indirect object in the dative. These include *crēdere* 'to believe', *nocēre* 'to be harmful to' and *subvenīre* 'to help' as in (7):

(6) *Dominus equum cōnsulī dedit*
master.NOM horse.ACC consul.DAT give.PERF.3SG
'The master gave the horse to the consul.'

(7) *Mihi subvēnistī*
me.DAT help.PERF.2SG
'You have helped me.'

The ablative in Latin represents the syncretism or merger of three once-distinct cases: the ablative, the locative and the instrumental. It is not surprising then to find that it expresses source, location and instrument. It is also described as having a number of other functions including expressing the 'agent of the passive', i.e. the demoted subject of the corresponding active as in *vīsus ā cōnsule* 'seen by the consul'.

Although the ablative alone can express a variety of relations to the verb of the clause, in most functions it is usually governed by a preposition. Prepositions governing the ablative include *ex* 'out of' (ex *Italiā* 'from Italy'), *in* 'in' (*in Italiā* 'in Italy') and *cum* 'with' (*cum amīcīs* 'with friends'). One function where it is normally used without any preposition is the instrumental as in *manū* 'by hand'. A handful of verbs take a complement in the ablative case. These include *ūtī* 'to use' and *vescī* 'to feed on'.

1.2 Other manifestations

The definition of case given in section 1.1 above can be regarded as a central definition. There are also manifestations of case that do not mark the relationship of dependent nouns to their heads, and others that do not form a system for marking nouns, at least not in an obvious sense, inasmuch as the exponents are prepositions or postpositions.

1.2.1 Concordial case

In some languages, including Indo-European case languages like Latin and Ancient Greek, case marking appears not only on nouns but on certain dependents of the noun such as adjectives and determiners. The following example is from Plato. *Bios* is a nominative singular form of a second-declension (*o*-stem) masculine noun, the nominative indicating that *bios* is the subject of the predicate. The definite article and the adjective are in the nominative singular masculine form, their **concord** in case, number and gender indicating that they are dependents of *bios*:[6]

(8)

Ho	*aneksetastos*	*bios*	*ou*	*biōtos*	*anthrōpō*
the.NOM.SG	unexamined.NOM.SG	life.NOM.SG	not	livable.NOM.SG	man.DAT.SG

'The unexamined life is not livable for man.'

This example also illustrates concord between a predicative adjective (*biōtos*) and the subject (*bios*). See also section 4.2.

Although the use of the nominative on *ho* and *aneksetastos* would appear to meet the definition of case in that it marks these words as dependents of *bios*, it does not mark the type of dependency. We could compare an adnominal genitive construction such as *ho anthrōpou bios* (the.NOM.SG man.GEN.SG life.NOM.SG) 'the life of man' where the genitive signals a type of dependency and meets the terms of the central definition offered in section 1.1.

1.2.2 Case on non-nouns

Case marking is found on pronouns as well as on nouns, but pronouns and nouns are clearly subclasses of the larger class 'nominal'. Case marking is also found on certain classes of word that are not obviously nouns. In the previous subsection it was mentioned that case could extend via concord to determiners and adjectives. Adjectives in Ancient Greek and Latin decline like nouns and can appear as the head of a noun phrase as in Greek *hoi polloi* (the.NOM.PL many.NOM.PL) 'the many' and *to meson* (the.NOM.SG middle.NOM.SG) 'the middle'. Adjectives in these

languages are analysable as a subclass of noun, and the Greek grammarians referred to them as the 'noun adjective' as opposed to the 'noun substantive', a usage that remained current until recent times. Determiners in Ancient Greek and Latin decline like nouns. They can stand as the sole member of a noun phrase, i.e. they function as pronouns, or they can accompany nouns as with *ho* in (8). Like adjectives they should be taken as a subclass of nominal.

Adverbs of place, time and manner play a role analogous to case-marked nouns. For instance, Latin *Unde fugit* 'Whence flees he?' can be answered by an ablative-marked noun expressing source: *Corinthō fugit* 'From Corinth he flees.' *Unde* the interrogative adverb and a noun in the ablative seem to bear the same relation or function. Adverbs of place, time and manner may bear no case marking, fossilised case marking, or case marking parallel with that of corresponding nouns. In Latin, examples of fossilised case marking are common, but there are also examples like *quā* 'by what way?' and *eā* 'by that way' where the *-ā* would appear to be parallel with the ablative *-ā* of the first declension singular. The presence or absence of identifiable case marking would appear to be of little importance; what is significant is the parallelism of function between adverbs and case-marked nouns. If grammatical relations are to be ascribed to nouns, it would seem logical to ascribe such relations to adverbs of place, time and manner. One can then specify that a complement of a particular verb must be in, say, the locative grammatical relation. This requirement can be fulfilled in a language like Latin by a noun in the ablative case (usually with an appropriate preposition) or by a locative adverb. See also section 1.3.3 and Table 2.3.

1.2.3 Vocatives

In the traditional description of Ancient Greek and Latin a **vocative** case appears (Table 1.2). The vocative is used as a form of address. In Latin, for instance, *domine* is the form used to address one's master as in *Quō vādis*, *domine?* (whither go.2SG lord.VOC) 'Where are you going, master?'. Vocatives do not appear as dependents in constructions, but rather they stand outside constructions or are inserted parenthetically (see (9) in chapter 4).[7] They are unlike other cases in that they do not mark the relation of dependents to heads. For these reasons vocatives have not always been considered cases (Hjelmslev 1935: 4). In Ancient Greek and Latin the vocative's claim to being a case is structural. The vocative is a word-final suffix like the recognised case suffixes. However, modified forms of nouns used as forms of address also occur in languages that do not have case inflection. In Yapese (Austronesian), for instance, there is no morphological case marking on nouns, but personal names have special forms used for address. There is no reason to consider that these modifications of names constitute a vocative case (Jensen 1991: 229f).[8]

1.2.4 Ungoverned case

In case languages one sometimes encounters phrases in an oblique case used as interjections, i.e. apart from sentence constructions. Mel'cuk (1986: 46) gives a Russian example *Aristokratov na fonar!* 'Aristocrats on the street-lamps!' where *Aristokratov* is accusative. One would guess that some expressions of this type have developed from governed expressions, but that the governor has been lost. A standard Latin example is *mē miserum* (1SG.ACC miserable.ACC) 'Oh, unhappy me!' As the translation illustrates, English uses the oblique form of pronouns in exclamations, and outside constructions generally.

1.2.5 Analytic case markers

In most languages adpositions (prepositions or postpositions) play at least some part in marking the relations of dependent nouns to their heads. In Japanese, for instance, postpositions perform this function to the exclusion of case affixes. In the following Japanese example *ga* marks the subject, *ni* marks the indirect object and *o* marks the direct object:

(9)

Sensei	*ga*	*Tasaku*	*ni*	*hon*	*o*	*yat-ta*
teacher	SUBJ	Tasaku	IO	book	DO	give-PAST

'The teacher gave Tasaku a book.'

Adpositions can be considered to be analytic case markers as opposed to synthetic case markers like the suffixes of Turkish or Latin. The main difference in case marking between a language like Japanese and a language like Latin is that in the former there are no case suffixes, just the postpositions, whereas in the latter there are case suffixes as well as adpositions. In Latin, which is fairly typical of languages having analytic as well as synthetic case markers, prepositions are like verbs in that they govern cases, and combinations of preposition and case suffix can serve to mark the relations of nouns to the verb. In the following examples we have a transitive verb governing the accusative (10a), a preposition *in* governing the accusative (10b), an intransitive verb governing the ablative (10c) and a preposition *in* governing the ablative (10d):

(10)

accusative

a. *Mīlitēs vident urbem* 'The troops see the city.'

b. *Mīlitēs vādunt in urbem* 'The troops go into the city.'

ablative

c. *Mīlitēs potiuntur urbe* 'The troops are in control of the city.'

d. *Mīlitēs manent in urbe* 'The troops stay in the city.'

In (10d) the ablative indicates location (in the context of *manēre* 'to remain' and *urbs* 'city') and *in* specifies 'inside' as opposed to *super* 'above', *sub* 'under', etc. Together the preposition and the case suffix indicate the relationship of *urbs* to the verb. Note that *in* can also govern the accusative as in (10b) where the combination of *in* + accusative signals 'into'. Most prepositions in Latin govern one particular case, but some like *in* can govern the accusative or the ablative. In some languages all adpositions require the same case, e.g. in Indo-Aryan languages postpositions with few exceptions require the 'oblique' case (see (11) below) and in English all prepositions govern the accusative (*with me, from her,* etc.). In situations like these it has been argued that the case suffix is redundant and the adposition bears the sole burden of marking the relation of dependent nouns to their heads as in Japanese.

In Hindi–Urdu, as in a number of other Indo-Aryan languages, there are three layers of case-marking elements: inflectional case, primary postpositions and secondary postpositions. Leaving aside the vocative, the inflectional case system distinguishes two cases, nominative and oblique. The nominative covers both subject and object and is generally referred to in Indo-Aryan linguistics as the direct case.

The oblique case is used with the primary postpositions such as *se* instrumental/ablative, *mẽ* locative, *ke* genitive and *ko* dative/accusative (it is used with indirect objects and specific, animate direct objects). There is also a third set of local postpositions that follow *ke* genitive:

(11)
a. *laṛka* (nominative, alternatively direct)
'boy'
b. *laṛke* (oblique)
c. *laṛke ko* (oblique + dative postposition)
'to the boy'
d. *laṛke ke sath* (oblique + genitive postposition + *sath* 'with')
'with the boy'

Where inflectional case and adpositions co-occur in a language, the adpositional system normally exhibits finer distinctions than the inflectional system. This is nowhere better illustrated than in languages like English and Hindi where the case system is near-minimal. In Hindi the secondary postpositions, which mostly express local notions such as 'between', 'in front of' and 'behind', make more distinctions than the primary postpositions.[9]

Although one can easily separate different layers of case marking in a particular language, as in Hindi for instance, it can be difficult to determine whether a single layer of case marking in a particular language is affixial or adpositional. Where the

markers in question figure in concord, they are clearly affixes, but where they occur only once in a phrase, usually at the end, there can be some doubt about whether they are inflections or free forms.

There are two kinds of evidence that can be sought, phonological and distributional. If the case marker in question displays a number of variants determined by the nature of the word or stem to which it is adjacent (excluding the effect of some kind of pervasive, phonetically motivated rule), then it is an affix. In Korean, for instance, the subject-marking form (which corresponds to Japanese *ga* as in (9)) has the shape *-ka* after stems ending in a vowel and *-i* after stems ending in a consonant. This would seem to indicate that the subject marker is a suffix. The *-ka/-i* alternation is phonologically conditioned and has some phonological motivation insofar as a consonant-initial suffix follows vowels and a vowel-initial suffix follows consonants, but it is not part of a pervasive rule (like syllable-final devoicing of obstruents in German).

In English there is clear distributional evidence to show that prepositions are words rather than prefixes, since they can stand on their own as in *Who did she give it to?* Evidence of this type is not forthcoming for most languages. Co-ordination of nouns would appear to provide a criterion. One might expect that case markers would have to appear on every co-ordinated noun whereas a preposition or postposition could appear only before or after the sequence of co-ordinated nouns. It turns out, however, that markers which are integrated into a stem, i.e. markers that would appear to be affixes on phonological grounds, are often restricted to one occurrence in phrase-final position with co-ordinated nouns. In Korean, for instance, the nominative or subject marker, *-ka/-i*, referred to above, cannot be used within a phrase co-ordinated with *kwa* (O'Grady 1991: 7):[10]

(12) a. *Joe-kwa* *Mary-ka* *yenay-lul* *hanta*
Joe-AND Mary-NOM love-ACC do
'Joe and Mary are in love.'
b. **Joe-ka-kwa* *Mary-ka* *yenay-lul* *hanta*

A piece of distributional evidence that might be thought relevant is whether the case-marking form always appears adjacent to the head. In Japanese and Korean the order within noun phrases is determined by a modifier–head principle so that a noun is always in phrase-final position. In the Australian language Diyari, however, the order is generally determiner–noun–adjective and the case marking is phrase-final. However, there is no chance of taking this marking to be postpositional on the grounds that it can be separated from the head noun by a dependent adjective, since the markers in question are very much integrated into the final word of the phrase whether it be a noun or an adjective. The ergative suffix, for instance,

has phonologically and morphologically determined allomorphs such as *-ndu* with female personal names and *-yali* with singular common nouns of two, four or five syllables whose final vowel is *i* or *u* (Austin 1981a: 48–9). Interestingly, this integrated marking need be used only on the last of a series of co-ordinated nouns. Clearly an affix can have a scope beyond the word of which it forms part.

There is one further complication. There are forms that are analysable as separate elements from the point of view of syntax (i.e. they are words), but which are pronounced as part of an adjacent word. Such forms are called **clitics**. If they are pronounced as part of the following word, they are **proclitics**. If they are pronounced as part of the preceding word, they are **enclitics**. The two varieties can be illustrated from French where the subject pronouns are normally proclitic, but can be enclitic in certain circumstances, in interrogatives, for instance, in those varieties that use subject–verb inversion:

(13) *Où descends-tu?*
'Where do you get off?'
A l'arrêt de la rue de Rivoli, je vais faire des emplettes.
'At the Rue de Rivoli stop, I'm going to do some shopping.'

The forms *tu* and *je* are enclitic and proclitic respectively in these examples. They cannot be stressed or pronounced as words separate from the adjacent verb. If stress is required, special nonclitic forms *toi* and *moi* must be used in addition.

Some prepositions and postpositions may be analysable as proclitics and enclitics respectively. In Turkish, for instance, there is a form *-ile/-ila* which can express instrument or accompaniment. In phrases such as *tren-le* 'by train' and *kız-lar-la* 'with the girls' it appears in reduced form and exhibits vowel harmony. It looks like a case suffix. However, it can be pronounced as a separate word and, like a number of other postposition-like forms, it governs the genitive with singular pronouns. This would indicate that it is a postposition that can be cliticised, i.e. that can be treated as a clitic. The form *-ile/-ila* is different from the French pronouns in that the latter are always clitics, whereas *-ile/-ila* may or may not be used as a clitic.

The view adopted in this work is that phonological integration into a host is the best guide to the affixial status of a case marker, but the fact remains that there are many phrase-final, nonintegrated case markers to be found in languages, and grammars often describe them as suffixes, postpositions or particles without any discussion of the basis for the decision.[11]

1.3 Competing mechanisms

Case in its most central manifestation is a system of marking dependent nouns for the type of relationship they bear to their head. However, it is not the only

grammatical mechanism for marking head–modifier relations. One important type of alternative is the principle of marking the head rather than the dependent (cf. Nichols 1986). Another common option is to use word order rather than head or dependent marking. Other means include the use of relator nouns and possessive adjectives. One could take the view that all these means of expressing grammatical relations are forms of case marking. The point is discussed briefly in section 3.3.

1.3.1 Head marking

In many languages, in the majority in fact, there is some kind of pronominal representation of certain core grammatical relations quite apart from their representation via noun phrases. This representation is almost always on the predicate, often on a grammatical (auxiliary) verb. In a few languages it is enclitic to the first constituent of the clause (e.g. in some Pama-Nyungan and in some Uto-Aztecan languages). In the following Swahili example the third-person-singular subject is represented by the first-order prefix on the verb (*a-*) and the third-person-singular object by the third-order prefix (*-m-*) (Hinnebusch 1979: 219). In Swahili, as in other Bantu languages, nouns fall into gender classes. Each class is marked by a prefix, which also appears via concord on adjectives and determiners. Nouns for humans take the prefix *m-* in the singular. This can be seen in the phrase *mwanamke mrembo*:

(14) *Ali a-na-m-penda m-wanamke m-rembo*
Ali 3SG.PRES-3SG-love M-woman M-beautiful
'Ali loves a beautiful woman.'

The grammatical relation most frequently represented in this way is the subject; however, some languages, including Swahili, also represent the direct object or other complements in this way. Traditionally the marking on the verb is referred to as subject agreement, object agreement, etc., but this term is also used for the type of subject–verb agreement found in French and the Germanic languages as in English *She runs* versus *They run*. There is an important difference. In French and the Germanic languages the subject noun phrase cannot normally be omitted with a finite, nonimperative verb, but in the majority type, illustrated by Swahili, the noun phrases corresponding to the relations represented on the verb can be omitted. In Swahili one can say *anampenda*, which means 'S/he loves him/her.' The term **cross-referencing agreement** is sometimes used for the Swahili type as opposed to the Germanic type (Bloomfield 1933: 193ff).

There is a further complication. It has been claimed that in languages with cross-referencing agreement the pronominal representation on the verb sometimes is interpretable as a mere agreement marker with the cross-referenced noun phrase

bearing the appropriate grammatical relation, while in other instances the pronominal marker is the sole exponent of the relevant relation and the cross-referenced noun phrase a mere adjunct in a kind of apposition with the pronominal element.[12] It is not appropriate to go into this question here. Suffice it to say that the cross-referencing pronominal elements serve as an alternative to case in signalling grammatical relations. Where there is more than one set of cross-referencing elements, the sets may be distinguished by order or by form or both. In Swahili the subject and object forms are always distinguished by their position and in a majority of instances by differences of form as in (14) above.

Where differences of form are involved these differences are likely to reflect earlier differences of case in the free forms from which they are derived. In many of the Northern languages of Australia the bound pronoun for first-person-singular subject is *nga* and the object form is *ngan*. The *-n* clearly signals the object relation, and probably derives from an accusative, but it is a moot point whether one should refer to marking on pronominal elements in the verb as case marking.[13]

Another type of marking on the verb that could be considered head marking is marking to indicate change of valency. The presence of a passive marker on the verb, for instance, is a form of head marking that determines how dependent marking is to be interpreted. In Latin *Gallī vincunt* is 'The Gauls conquer', but the addition of the passive marker *-ur* to the verb yields *Gallī vincuntur* 'The Gauls are (being) conquered.'[14]

In some languages the person and number of a dependent possessor noun is cross-referenced on the head-possessed noun as in Hungarian *az ember haz-a* (the man house-3SG), literally, 'the man his house', i.e. 'the man's house'. An example of marking both the head and the dependent in a possessive construction was given from Turkish in section 1.1.

Another type of head marking in noun phrases indicates the presence of a dependent. In Semitic languages a noun with a noun dependent is in what is called the construct state. In Arabic, for instance, 'the book of the king' is *kitābu lmaliki*, where *kitābu* 'book' is in the construct state (a nominative form lacking both the definite article and the *-n* that marks indefiniteness) and *lmaliki* is genitive (Kaye 1987: 678). In Persian a noun with dependent is suffixed with *-e: ketà̀b-e mán* 'book of me, my book' (Windfuhr 1987: 532).

1.3.2 Word order

Fairly obviously word order is an alternative to case marking in distinguishing subject from object in languages like English, Thai, Vietnamese and Indonesian, all of which use the order subject–verb–object as their unmarked option. In English the word order also distinguishes the patient object from the recipient or beneficiary object in double-object constructions where the patient object

always follows the other object: *She gave me good marks, She cut me a bunch of dahlias.*

It has frequently been observed that there is a correlation between the presence of case marking on noun phrases for the subject–object distinction and flexible word order and this would appear to hold true. From the work of Greenberg it would also appear that there is a tendency for languages that mark the subject–object distinction on noun phrases to have a basic order of subject–object–verb (SOV), and conversely a tendency for languages lacking such a distinction to have the order subject–verb–object (SVO) (Greenberg 1963). The following figures are based on a sample of 100 languages. They show the relationship between case and marking for the 85 languages in the sample that exhibit one of the more commonly attested basic word orders. The notation [+ case] in this context means having some kind of marking, including adpositions, on noun phrases to mark the subject–object distinction (Mallinson and Blake 1981: 179).

(15)	VSO	[+ case]	3	SVO	[+ case]	9	SOV	[+ case]	34
		[− case]	6		[− case]	26		[− case]	7

The SVO 'caseless' languages are concentrated in western Europe (e.g. English), southern Africa (e.g. Swahili) and east and southeast Asia (e.g. Chinese and Vietnamese).

1.3.3 Adverbs and relator nouns

It is common in Australian languages to use 'location words' in conjunction with the locative case. The locative signals location or proximity in general and the location word indicates the specific orientation of the located entity with reference to the location. The following example is from Pitta-Pitta:

(16)	*Nhangka-ya*	*thithi*	*kunti-ina*	*kuku-ina*
	sit-PRES	old.bro	house-LOC	back-LOC

'Elder brother is sitting at the back of the house.'

Kuku-ina can be identified with *kuku* '(anatomical) back', but it is not an ordinary noun here; it cannot be qualified. In any event the full range of words that can be used to signal relative orientation cannot be analysed in terms of stems identifiable with nouns and suffixes identifiable with case markers. Words like *kukuina* in (16) are used as dependents of the verb in parallel with locative-marked nouns. Their position relative to the locative-marked noun is not fixed and the two need not be contiguous. A good literal translation of (16) would be 'Elder brother is sitting by the house, at the back.'

In (16) the adverb-like word is parallel with the locative-marked word. Another possibility is for the relative orientation to be specified by a word that is in series between the head and the location. This is the situation with words like *top* as in *It stands on top of the cupboard* and *front* as in *She is sitting in front of the house. Top* and *front* are nouns in that they stand at the head of noun phrases, but they are different from the common nouns *top* and *front* in that they cannot be modified by an indefinite article nor by adjectives. They belong to a small subclass of nouns that are sometimes referred to as **relator nouns**.[15] Location words used in parallel with locative-marked nouns, i.e. words like *kukuina* in (16), could also be taken to be relator nouns rather than adverbs.

Relator nouns are a feature of Chinese. In the following example *qiántou* 'front' is the head of a noun phrase just as 'front' is in the translation. It is the complement of *zhàn-zai* and it has *de* as its dependent which in turn has dà-mén as its dependent (Starosta 1988: 203):

(17)

Tā	*zhàn-zai*	*dà-mén*	*de*	*qiántou*
s/he	stand-at	big-gate	of	front

'S/he is standing in front of the main door.'

Chinese also employs combinations of nouns and locational noun roots. The locational forms do not occur as separate lexical items and in some descriptions they are treated effectively as postpositions or 'locative particles' (Li and Thompson 1981: 25, 390ff). Since combinations of noun plus locational form can be governed by prepositions, a better analysis might be to take the combinations to be pseudocompounds ('pseudo-' since the second element does not occur as a free form). Such an analysis is adopted in Starosta (1988: 206). In the following example *mén qián* is a pseudocompound:

(18)

Tā	*zhàn-zai*	*dà*	*mén*	*qián*
s/he	stand-at	big	gate	front

'S/he is standing at the main door front.'

Under this interpretation the locative relationship is treated derivationally. In various varieties of colloquial English such compounding occurs to produce locative adverbs: *He went States-side. She went sundown-way* (i.e. west). Location is also treated derivationally in formations such as *homewards, skywards* or Keats' *Lethewards*. In Bantu languages locative marking on nouns is derivational. As noted in connection with the Swahili example given above (14), nouns in Bantu languages fall into a number of classes. Each class is marked by a prefix. The classes are associated with humans, plants and so on, and there are separate classes for the

plurals of the various classes. To express location a noun is derived into one of several locative classes. In Swahili, for instance, there is a *pa-* class for specific location, a *ku-* class for 'to', 'from' and nonspecific location, and a *m(u)-* class to express 'inside'. The word for 'house' is *nyumba*. It is normally in the *n*-class. To express 'in the house' *nyumba* is suffixed with *-ni* and put in the *m(u)-* class. The *n-* and *m(u)-* prefixes do not appear directly with *nyumba*, but they do appear on dependents via concord and on the verb via cross-referencing agreement. Compare the following examples,

(19) *Nyumba i-na mi-lango mi-wili*
house N-has MI-door MI-two
'The house has two doors.'

(20) *Nyumba-ni m-na wa-tu*
house-LOC MU-has WA-person
'In-the-house has people.'

In (19) *nyumba* is in the *n*-class which takes *i-* as its cross-referencing agreement marker for subject. In (20) *nyumba* is suffixed with *-ni*, which looks like an inflectional locative case suffix, but *nyumba* is now in the *mu-* 'inside' class as indicated by the subject marker on the verb. The fact that *nyumbani* is cross-referenced by a subject marker indicates that it is a subject. *Nyumbani* is not an inflected form of *nyumba*, but a form derived into another class. Normally a noun inflected for locative or marked by a locative adposition could not function as subject or object. The Bantu languages have incorporated both number (singular versus plural) and location into a noun class or gender system.

1.3.4 Possessive adjectives

A pronominal dependent of a noun can be expressed in the genitive case, but in some languages possessive adjectives perform a similar function. In Old English *mīn* is the genitive case form of the first-person pronoun; *mīn bāt* is 'my boat'. However, genitive forms like *mīn* were reinterpreted as stems and used as possessive adjectives. Thus 'He saw my boat' was expressed as *Hē seah mīnne bāt* where *mīn* takes the masculine, accusative, singular inflection in concord with *bāt*.

In Latin genitive forms of pronouns were generally used as objective genitives and possessive adjectives were used in a 'subjective' role. For instance, *tua memoria meī* (your memory me.GEN) means 'Your recollection of me' where *tua*, the possessive adjective, corresponds to the subject of the corresponding verb and *meī*, the possessive pronoun, to its object or genitive complement.